

REMARKS

Claims 1-61 are pending in the application, of which Claims 1, 8, 15, 22, 33, 42 and 53 are independent claims. All claims have been rejected. The rejections are traversed.

Certain claim amendments have been made to place the claims in better form. Those amendments are not an acquiescence to the rejections or added for reasons of patentability. New claims have also been added to the application.

The Applicants disclose and claim a wireless communication system having mobility-based content delivery. As claimed, a portable wireless transceiver has an associated mobility state. For example, the transceiver can be stationary, traveling a slow speed (walking), or traveling at a high speed (driving).

Prior art systems attempt to maintain the same level of service regardless of mobility. As the transceiver travels at higher speeds, the base station must allocate more resources to that transceiver to maintain a specified level of service. Typically, that process reduces the subscriber capacity of the base station.

In contrast to the prior art, the Applicants claim a system that specifies a tiered level of service, based on a mobility state. A subscriber willing to pay a premium can have the same quality of service at all mobility states, but for others the level of service is adapted based on the mobility state. This is accomplished by restricting the transmission of certain content over the wireless link. For example, a subscriber traveling at a high speed may not be sent high bandwidth content, such as streaming video. Instead, the system would inhibit or block that content from being transmitted over the wireless link. The cited references do not teach or suggest the claimed invention.

Regarding Rejections under 35 U.S.C. § 112

Claims 25, 38, 45, and 58 have been rejected under 35 U.S.C. § 112, second paragraph. The Office Action asserts that wireless networks do not use service ports. The claimed service ports are not specified as being part of the wireless network, but instead are part of the overall system. The data packets can be routed according to internet protocols until wirelessly

transmitted by the base station, including the use of service port numbers. The base station and gateways can therefore distinguish content type based on the service port number, as claimed.

Reconsideration of the rejection under 35 U.S.C. § 112 is respectfully requested.

Regarding Rejections under 35 U.S.C. § 102

Claims 1-4, 7-11, 14-18, and 21 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,091,956 to Hollenberg. Claims 22-23, 28-30, 42-43, and 48-50 have been rejected under § 102(e) as being anticipated by U.S. 6,169,858 to Hsu et al. In addition, Claims 1, 5-6, 8, 12-13, 15, and 19-20 have been rejected under § 102(b) as being anticipated by U.S. Patent No. 6,032,044 to Shannon et al. In response, the rejections are traversed.

Because the dependent claims depend from and add additional limitations to base claims, allowance of the dependent claims follows from allowance of the base claims. Consequently, only rejections of base claims 1, 8, 15, 22 and 42 will be discussed.

Hollenberg discusses a situation information system. In particular, the system identifies the location of a portable computer and its direction and rate of travel. That identification is derived from GPS data. Once the location is known, the computer receives information data relevant to that location, such as traffic information and area attractions. Hollenberg does not suggest “limiting the transmission of content” over a communication link based on a mobility state, as recited in original base claims 1, 8 and 15.

Hsu discusses a system for monitoring a selected quality of service level in a radio communication system. A subscriber’s quality of service is maintained even while the subscriber unit is in motion. This requires that resources be reserved for the moving subscriber both in the current cell and in cells along the predicted movement path. Instead of limiting the transmission of content, Hsu allocates additional resources to deliver the content. Hsu does not suggest affecting the rate of data transmittal over the wireless communication link, based on the level of service and mobility state, as recited in original base claims 22 and 42.

As for Shannon, a cellular communications system is discussed that comprises a plurality of zones. The services available to subscribers in each zone can be different. As a subscriber moves from zone to zone, the subscriber’s services can change. This change in services is

unrelated to mobility state — it is based on location within a zone. That is, the subscriber's service level is the same within any zone, regardless of whether the subscriber is stationary, walking or driving. Shannon does not suggest "limiting the transmission of content" over a communication link based on a "mobility state" as recited in original base claims 1, 8 and 15.

Reconsideration of the rejections and 35 U.S.C. § 102 is respectfully requested.

Regarding Rejections under 35 U.S.C. § 103

Claims 24-27 and 44-47 have been rejected under 35 U.S.C. § 103(a) based on Hsu in combination with U.S. Patent No. 6,374,112 to Widegren et al. Claims 31-32 and 51-52 have been rejected under § 103(a) based on Hsu in combination with Shannon. Finally, Claims 33-41 and 53-61 have been rejected under § 103(a) based on Shannon in combination with U.S. Patent No. 5,255,307 to Mizikovsky. The rejections are traversed.

Because the dependent claims depend from and add additional limitations to base claims, allowance of the dependent claims follows from allowance of the base claims. Consequently, only the rejections of base claims 33 and 53 will be discussed.

The zone-base service structure of Shannon was discussed above. Shannon fails to suggest the use of a mobility state and furthermore fails to suggest the claimed mobility processing routine and content filter.

Mizikovsky is similar to Shannon, by discussing a home system and a visited system. The cellular unit includes a HOME/ROAM indicator for indicating to the subscriber when the unit is active on the home system and when it is roaming on the visited system. While roaming, the subscriber may have a different level of service. Like Shannon, Mizikovsky fails to suggest the use of a mobility state, or mobility processing routine, and a content filter responsive to the mobility state.

Widegren fails to cure to the deficiencies of the discussed references.

Reconsideration of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 
Rodney D. Johnson
Registration No. 36,558
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

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